NOT

```
RAW SEQUENCE LISTING            DATE: 04/05/2001
PATENT APPLICATION:  US/09/814,604   TIME: 08:13:03

Input Set : A:\Ar4528.txt
Output Set: N:\CRF3\04052001\I814604.raw
```

P.5 # 2.

ENTERED

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    4 <110> APPLICANT: Klein, Elliott S.
    5        Chandraratna Roshantha A.
    7 <120> TITLE OF INVENTION: Methods of Detecting Dissociated Nuclear
    8        Hormone Receptor Ligands
   11 <130> FILE REFERENCE: P-AR 4528
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/814,604
C--> 13 <141> CURRENT FILING DATE: 2001-03-22
   13 <160> NUMBER OF SEQ ID NOS: 52
   15 <170> SOFTWARE: FastSEQ for Windows Version 4.0
   17 <210> SEQ ID NO: 1
   18 <211> LENGTH: 462
   19 <212> TYPE: PRT
   20 <213> ORGANISM: Homo sapiens
   22 <400> SEQUENCE: 1
   23 Met Ala Ser Asn Ser Ser Ser Cys Pro Thr Pro Gly Gly Gly His Leu
   24 1               5                  10               15
   25 Asn Gly Tyr Pro Val Pro Pro Tyr Ala Phe Phe Phe Pro Pro Met Leu
   26         20               25               30
   27 Gly Gly Leu Ser Pro Pro Gly Ala Leu Thr Thr Leu Gln His Gln Leu
   28         35               40               45
   29 Pro Val Ser Gly Tyr Ser Thr Pro Ser Pro Ala Thr Ile Glu Thr Gln
   30     50               55               60
   31 Ser Ser Ser Ser Glu Glu Ile Val Pro Ser Pro Pro Ser Pro Pro Pro
   32 65               70               75               80
   33 Leu Pro Arg Ile Tyr Lys Pro Cys Phe Val Cys Gln Asp Lys Ser Ser
   34         85               90               95
   35 Gly Tyr His Tyr Gly Val Ser Ala Cys Glu Gly Cys Lys Gly Phe Phe
   36         100              105              110
   37 Arg Arg Ser Ile Gln Lys Asn Met Val Tyr Thr Cys His Arg Asp Lys
   38         115              120              125
   39 Asn Cys Ile Ile Asn Lys Val Thr Arg Asn Arg Cys Gln Tyr Cys Arg
   40     130              135              140
   41 Leu Gln Lys Cys Phe Glu Val Gly Met Ser Lys Glu Ser Val Arg Asn
   42 145              150              155              160
   43 Asp Arg Asn Lys Lys Lys Lys Glu Val Pro Lys Pro Glu Cys Ser Glu
   44         165              170              175
   45 Ser Tyr Thr Leu Thr Pro Glu Val Gly Glu Leu Ile Glu Lys Val Arg
   46         180              185              190
   47 Lys Ala His Gln Glu Thr Phe Pro Ala Leu Cys Gln Leu Gly Lys Tyr
   48         195              200              205
   49 Thr Thr Asn Asn Ser Ser Glu Gln Arg Val Ser Leu Asp Ile Asp Leu
   50     210              215              220
   51 Trp Asp Lys Phe Ser Glu Leu Ser Thr Lys Cys Ile Ile Lys Thr Val
   52 225              230              235              240
   53 Asp Phe Ala Lys Gln Leu Pro Gly Phe Thr Thr Leu Thr Ile Ala Asp
   54         245              250              255
   55 Gln Ile Thr Leu Leu Lys Ala Ala Cys Leu Asp Ile Leu Ile Leu Arg
```

```
56           260              265              270
57 Ile Cys Thr Arg Tyr Thr Pro Glu Gln Asp Thr Met Thr Phe Ser Asp
58           275              280              285
59 Gly Leu Thr Leu Asn Arg Thr Gln Met His Asn Ala Gly Phe Gly Pro
60       290              295              300
61 Leu Thr Asp Leu Val Phe Ala Phe Ala Asn Gln Leu Leu Pro Leu Glu
62 305              310              315              320
63 Met Asp Asp Ala Glu Thr Gly Leu Leu Ser Ala Ile Cys Leu Ile Cys
64           325              330              335
65 Gly Asp Arg Gln Asp Leu Glu Gln Pro Asp Arg Val Asp Met Leu Gln
66           340              345              350
67 Glu Pro Leu Leu Glu Ala Leu Lys Val Tyr Val Arg Lys Arg Arg Pro
68       355              360              365
69 Ser Arg Pro His Met Phe Pro Lys Met Leu Met Lys Ile Thr Asp Leu
70       370              375              380
71 Arg Ser Ile Ser Ala Lys Gly Ala Glu Arg Val Ile Thr Leu Lys Met
72 385              390              395              400
73 Glu Ile Pro Gly Ser Met Pro Pro Leu Ile Gln Glu Met Leu Glu Asn
74           405              410              415
75 Ser Glu Gly Leu Asp Thr Leu Ser Gly Gln Pro Gly Gly Gly Gly Arg
76           420              425              430
77 Asp Gly Gly Gly Leu Ala Pro Pro Pro Gly Ser Cys Ser Pro Ser Leu
78       435              440              445
79 Ser Pro Ser Ser Asn Arg Ser Ser Pro Ala Thr His Ser Pro
80       450              455              460
83 <210> SEQ ID NO: 2
84 <211> LENGTH: 448
85 <212> TYPE: PRT
86 <213> ORGANISM: Homo sapiens
88 <400> SEQUENCE: 2
89 Met Phe Asp Cys Met Asp Val Leu Ser Val Ser Pro Gly Gln Ile Leu
90 1                 5                10               15
91 Asp Phe Tyr Thr Ala Ser Pro Ser Ser Cys Met Leu Gln Glu Lys Ala
92           20                  25               30
93 Leu Lys Ala Cys Phe Ser Gly Leu Thr Gln Thr Glu Trp Gln His Arg
94           35                  40               45
95 His Thr Ala Gln Ser Ile Glu Thr Gln Ser Thr Ser Ser Glu Glu Leu
96       50                  55               60
97 Val Pro Ser Pro Pro Ser Pro Leu Pro Pro Arg Val Tyr Lys Pro
98 65                  70                  75               80
99 Cys Phe Val Cys Gln Asp Lys Ser Ser Gly Tyr His Tyr Gly Val Ser
100              85                  90                  95
101 Ala Cys Glu Gly Cys Lys Gly Phe Phe Arg Arg Ser Ile Gln Lys Asn
102              100              105              110
103 Met Ile Tyr Thr Cys His Arg Asp Lys Asn Cys Val Ile Asn Lys Val
104           115              120              125
105 Thr Arg Asn Arg Cys Gln Tyr Cys Arg Leu Gln Lys Cys Phe Glu Val
106       130              135              140
107 Gly Met Ser Lys Glu Ser Val Arg Asn Asp Arg Asn Lys Lys Lys Lys
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RAW SEQUENCE LISTING   DATE: 04/05/2001
PATENT APPLICATION: US/09/814,604   TIME: 08:13:03

Input Set : A:\Ar4528.txt
Output Set: N:\CRF3\04052001\I814604.raw

```
108 145                 150                 155                 160
109 Glu Thr Ser Lys Gln Glu Cys Thr Glu Ser Tyr Glu Met Thr Ala Glu
110                 165                 170                 175
111 Leu Asp Asp Leu Thr Glu Lys Ile Arg Lys Ala His Gln Glu Thr Phe
112                 180                 185                 190
113 Pro Ser Leu Cys Gln Leu Ala Lys Tyr Thr Thr Asn Ser Ser Ala Asp
114             195                 200                 205
115 His Arg Val Arg Leu Asp Leu Gly Leu Trp Asp Lys Phe Ser Glu Leu
116     210                 215                 220
117 Ala Thr Lys Cys Ile Ile Lys Ile Val Glu Phe Ala Lys Arg Leu Pro
118 225                 230                 235                 240
119 Gly Phe Thr Gly Leu Thr Ile Ala Asp Gln Ile Thr Leu Leu Lys Ala
120                 245                 250                 255
121 Ala Cys Leu Asp Ile Leu Ile Leu Arg Ile Cys Thr Arg Tyr Thr Pro
122             260                 265                 270
123 Glu Gln Asp Thr Met Thr Phe Ser Asp Gly Leu Thr Leu Asn Arg Thr
124     275                 280                 285
125 Gln Met His Asn Ala Gly Phe Gly Pro Leu Thr Asp Leu Val Phe Thr
126     290                 295                 300
127 Phe Ala Asn Gln Leu Leu Pro Leu Glu Met Asp Asp Thr Glu Thr Gly
128 305                 310                 315                 320
129 Leu Leu Ser Ala Ile Cys Leu Ile Cys Gly Asp Arg Gln Asp Leu Glu
130             325                 330                 335
131 Glu Pro Thr Lys Val Asp Lys Leu Gln Glu Pro Leu Leu Glu Ala Leu
132             340                 345                 350
133 Lys Ile Tyr Ile Arg Lys Arg Arg Pro Ser Lys Pro His Met Phe Pro
134     355                 360                 365
135 Lys Ile Leu Met Lys Ile Thr Asp Leu Arg Ser Ile Ser Ala Lys Gly
136     370                 375                 380
137 Ala Glu Arg Val Ile Thr Leu Lys Met Glu Ile Pro Gly Ser Met Pro
138 385                 390                 395                 400
139 Pro Leu Ile Gln Glu Met Met Glu Asn Ser Glu Gly His Glu Pro Leu
140             405                 410                 415
141 Thr Pro Ser Ser Ser Gly Asn Thr Ala Glu His Ser Pro Ser Ile Ser
142             420                 425                 430
143 Pro Ser Ser Val Glu Asn Ser Gly Val Ser Gln Ser Pro Leu Val Gln
144             435                 440                 445
147 <210> SEQ ID NO: 3
148 <211> LENGTH: 454
149 <212> TYPE: PRT
150 <213> ORGANISM: Homo sapiens
152 <400> SEQUENCE: 3
153 Met Ala Thr Asn Lys Glu Arg Leu Phe Ala Ala Gly Ala Leu Gly Pro
154 1                 5                 10                 15
155 Gly Ser Gly Tyr Pro Gly Ala Gly Phe Pro Phe Ala Phe Pro Gly Ala
156             20                 25                 30
157 Leu Arg Gly Ser Pro Pro Phe Glu Met Leu Ser Pro Ser Phe Arg Gly
158             35                 40                 45
159 Leu Gly Gln Pro Asp Leu Pro Lys Glu Met Ala Ser Leu Ser Val Glu
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/814,604

DATE: 04/05/2001
TIME: 08:13:03

Input Set : A:\Ar4528.txt
Output Set: N:\CRF3\04052001\I814604.raw

```
160      50                55                60
161 Thr Gln Ser Thr Ser Ser Glu Glu Met Val Pro Ser Ser Pro Ser Pro
162 65                70                75                80
163 Pro Pro Pro Pro Arg Val Tyr Lys Pro Cys Phe Val Cys Asn Asp Lys
164              85                90                95
165 Ser Ser Gly Tyr His Tyr Gly Val Ser Ser Cys Glu Gly Cys Lys Gly
166              100               105               110
167 Phe Phe Arg Arg Ser Ile Gln Lys Asn Met Val Tyr Thr Cys His Arg
168              115               120               125
169 Asp Lys Asn Cys Ile Ile Asn Lys Val Thr Arg Asn Arg Cys Gln Tyr
170      130               135               140
171 Cys Arg Leu Gln Lys Cys Phe Glu Val Gly Met Ser Lys Glu Ala Val
172 145               150               155               160
173 Arg Asn Asp Arg Asn Lys Lys Lys Lys Glu Val Lys Glu Glu Gly Ser
174              165               170               175
175 Pro Asp Ser Tyr Glu Leu Ser Pro Gln Leu Glu Glu Leu Ile Thr Lys
176              180               185               190
177 Val Ser Lys Ala His Gln Glu Thr Phe Pro Ser Leu Cys Gln Leu Gly
178      195               200               205
179 Lys Tyr Thr Thr Asn Ser Ser Ala Asp His Arg Val Gln Leu Asp Leu
180      210               215               220
181 Gly Leu Trp Asp Lys Phe Ser Glu Leu Ala Thr Lys Cys Ile Ile Lys
182 225               230               235               240
183 Ile Val Glu Phe Ala Lys Arg Leu Pro Gly Phe Thr Gly Leu Ser Ile
184              245               250               255
185 Ala Asp Gln Ile Thr Leu Leu Lys Ala Ala Cys Leu Asp Ile Leu Met
186              260               265               270
187 Leu Arg Ile Cys Thr Arg Tyr Thr Pro Glu Gln Asp Thr Met Thr Phe
188      275               280               285
189 Ser Asp Gly Leu Thr Leu Asn Arg Thr Gln Met His Asn Ala Gly Phe
190      290               295               300
191 Gly Pro Leu Thr Asp Leu Val Phe Ala Phe Ala Gly Gln Leu Leu Pro
192 305               310               315               320
193 Leu Glu Met Asp Asp Thr Glu Thr Gly Leu Leu Ser Ala Ile Cys Leu
194              325               330               335
195 Ile Cys Gly Asp Arg Met Asp Leu Glu Glu Pro Glu Lys Val Asp Lys
196              340               345               350
197 Leu Gln Glu Pro Leu Leu Glu Ala Leu Arg Leu Tyr Ala Arg Arg Arg
198      355               360               365
199 Arg Pro Ser Gln Pro Tyr Met Phe Pro Arg Met Leu Met Lys Ile Thr
200      370               375               380
201 Asp Leu Arg Gly Ile Ser Thr Lys Gly Ala Glu Arg Ala Ile Thr Leu
202 385               390               395               400
203 Lys Met Glu Ile Pro Gly Pro Met Pro Pro Leu Ile Arg Glu Met Leu
204              405               410               415
205 Glu Asn Pro Glu Met Phe Glu Asp Asp Ser Ser Gln Pro Gly Pro His
206              420               425               430
207 Pro Asn Ala Ser Ser Glu Asp Glu Val Pro Gly Gly Gln Gly Lys Gly
208      435               440               445
```

RAW SEQUENCE LISTING   DATE: 04/05/2001
PATENT APPLICATION: US/09/814,604   TIME: 08:13:03

Input Set : A:\Ar4528.txt
Output Set: N:\CRF3\04052001\I814604.raw

```
209 Gly Leu Lys Ser Pro Ala
210      450
213 <210> SEQ ID NO: 4
214 <211> LENGTH: 9
215 <212> TYPE: PRT
216 <213> ORGANISM: Artificial Sequence
218 <220> FEATURE:
219 <223> OTHER INFORMATION: synthetic peptide
221 <221> NAME/KEY: VARIANT
222 <222> LOCATION: (1)...(9)
223 <223> OTHER INFORMATION: Xaa = Any Amino Acid
225 <221> NAME/KEY: VARIANT
226 <222> LOCATION: (1)...(9)
227 <223> OTHER INFORMATION: Xaa = Any Amino Acid
229 <400> SEQUENCE: 4
230 Leu Xaa Xaa Ile Ile Xaa Xaa Xaa Leu
231 1               5
234 <210> SEQ ID NO: 5
235 <211> LENGTH: 8
236 <212> TYPE: PRT
237 <213> ORGANISM: Artificial Sequence
239 <220> FEATURE:
240 <223> OTHER INFORMATION: synthetic peptide
242 <400> SEQUENCE: 5
243 Asp Tyr Lys Asp Asp Asp Asp Lys
244 1               5
247 <210> SEQ ID NO: 6
248 <211> LENGTH: 9
249 <212> TYPE: PRT
250 <213> ORGANISM: Artificial Sequence
252 <220> FEATURE:
253 <223> OTHER INFORMATION: synthetic peptide
255 <400> SEQUENCE: 6
256 Tyr Pro Tyr Asp Val Pro Asp Tyr Ala
257 1               5
260 <210> SEQ ID NO: 7
261 <211> LENGTH: 10
262 <212> TYPE: PRT
263 <213> ORGANISM: Artificial Sequence
265 <220> FEATURE:
266 <223> OTHER INFORMATION: synthetic peptide
268 <400> SEQUENCE: 7
269 Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu
270 1               5                   10
273 <210> SEQ ID NO: 8
274 <211> LENGTH: 6
275 <212> TYPE: PRT
276 <213> ORGANISM: Artificial Sequence
278 <220> FEATURE:
```

Please Note:
Use f n and/ r Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing t ensure that a corresp nding explanation is presented in the <220> t
<223> fields f each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY
· PATENT APPLICATION: US/09/814,604

DATE: 04/05/2001
TIME: 08:13:04

Input Set : **A:\Ar4528.txt**
Output Set: **N:\CRF3\04052001\I814604.raw**

```
L:13  M:270 C: Current Application Number differs, Replaced Current Application No
L:13  M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:230 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:312 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10
L:327 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:342 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:357 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13
L:372 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:387 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:402 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16
L:428 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18
```